

Figure 1

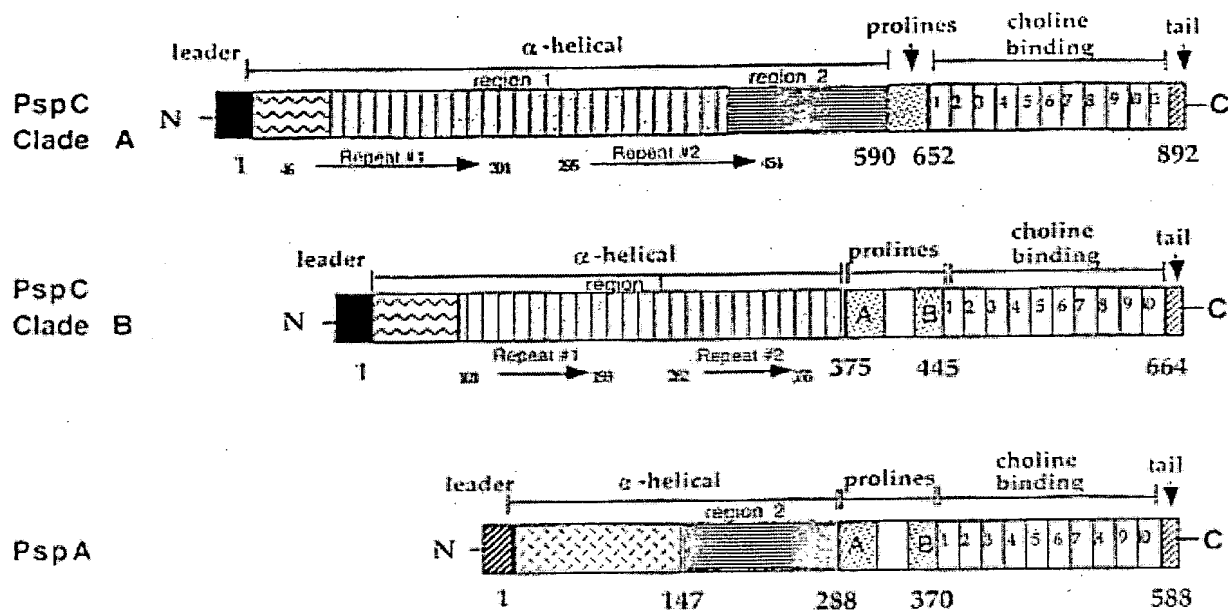


Figure 2

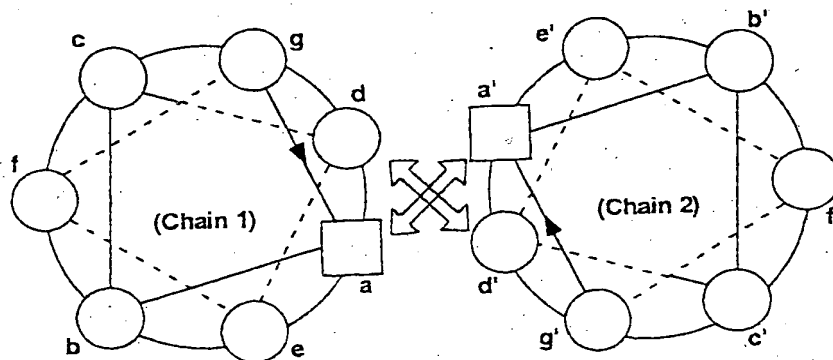


Figure 3

1. Identify Potential epitopes in PspA from Clinically Revelant Strains

Strain BG 8743 (Sterotype 23F)
defgabcdefgabcdefgab
LEKDVEDFKNSDGEQAEQVL (SEQ ID NO: 10)
Residues 290-301

Strain EF5668 (Sterotype 4)
defgabcdefgabcd
LEDNLKDAETNNVED (SEQ ID NO: 11)
Residues 330-344

Strain BG 8090 (Sterotype 19F)
defgabcdef
LAKKQTELEK (SEQ ID NO: 12)
Residues 267-276

2. Splice Epitopes Together

DVEDFKNSDGELEDNLKDAETNNVEDAKKQTELEK (SEQ ID NO: 13)

3. Replace a and d Positions (underlined)

DIEDLKNSIGELEDNIKELETNIVELAKKITELEK (SEQ ID NO: 14)

Figure 4

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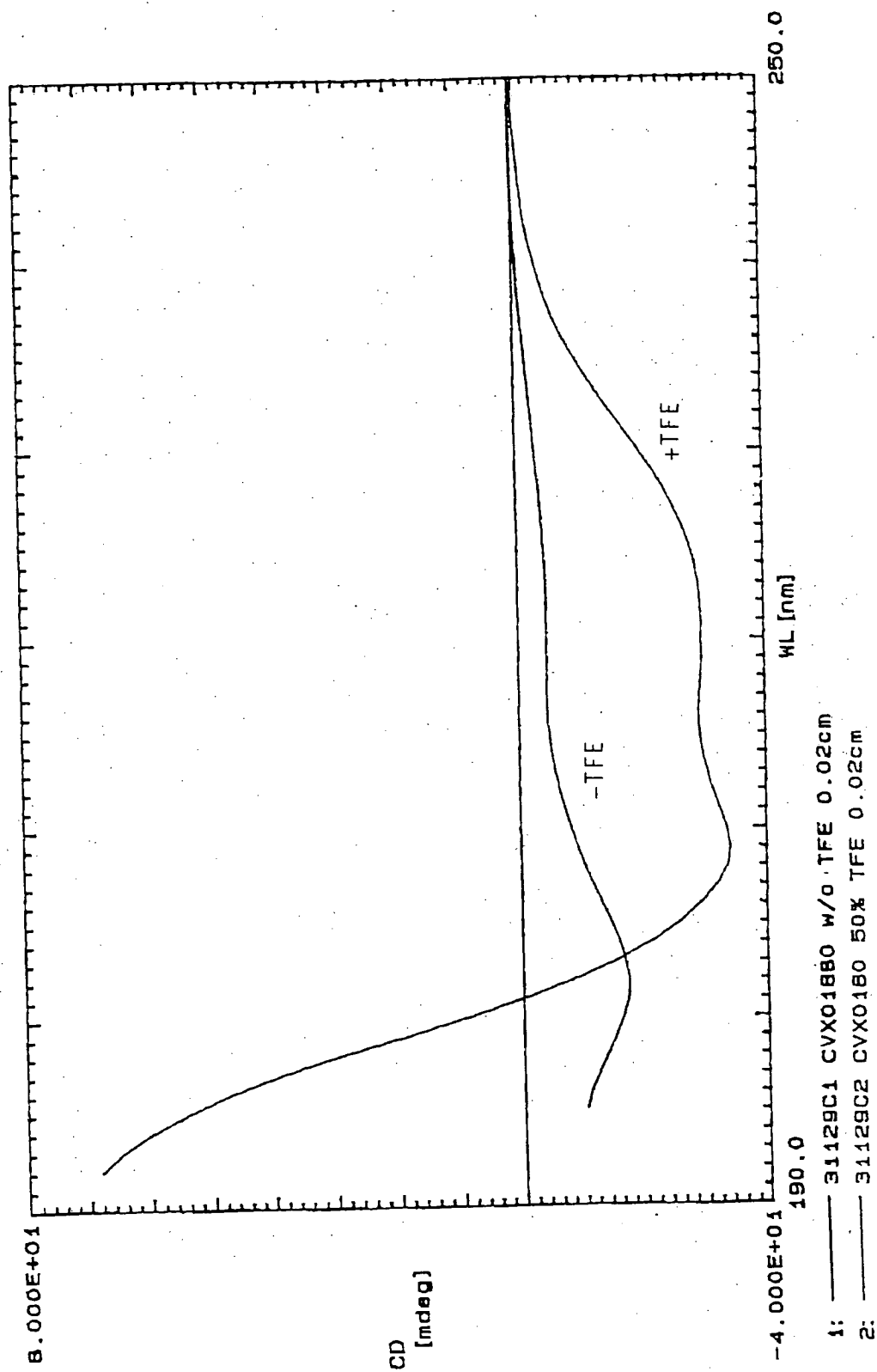


Figure 5

Consensus ---E---E-L--KIDELD-EIA-LEK-V---E---K---E---E-Y-- 79

BG6692 ---E---E---LSDKIDELDAETAKLEKNV---E-DF-KNSNGEQ-AEQY-R 299

Strain 23 ---E---E---LSDKIDELDAETAKLEKNV---E-DF-KNSNGEQ-AEQY-R 135

Strain SP ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEY-SALY-L 135

Strain SP ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEY-SALY-L 135

BG8838 ---E---E---LSDKIDELDAETAKLEKNV---E-DF-KNSNGEQ-AEQY-R 299

strain 13 ---E---E---LSDKIDELDAETAKLEKNV---E-DF-KNSNGEQ-AEQY-R 95

Strain SP ---E---A---LQNKVADLENKVAELDKEVTRLQSDL-KDAEENN-VEQYVK 127

Strain 18 ---E---A---LQNKVADLENKVAELDKEVTRLQSDL-KDAEENN-VEQYVK 98

BG8743 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 307

Strain 16 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 143

Strain 90 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 121

Strain 13 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 120

Strain 11 ---A---E---LDKKADELQNKVADLEKEISNLEILL-GGADPE---DDT-- 86

Strain 43 ---A---E---LNKKVESLQNKVADLEKEISNLEILL-GGADPE---DDT-- 99

Strain 23 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 84

BG11703 AAFA---E---LNKKVEALQNOVAELEELSKEEDNL-KDAETNN-VEQYIK 366

BG7817 AAFA---E---LNKKVEALQNOVAELEELSKEEDNL-KDAETNN-VEQYIK 366

Strain 18 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 122

BG9739 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AGQYL- 283

L81905 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AGQYL- 283

PspA AC94 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSGGGY-SALYL- 280

Strain 15 ---E---E---LSDKIDELDAETAKLEKDV---E-DF-KNSDGEQ-AEQYLV 145

ATCC6303 AAADANIEALQNKVADLENKVAELDKEVTRLQSDL-KDAEENN-VEQYVK 348

BG7561 AAFA---E---LNKKVEALQNOVAELEELSKEEDNL-KDAETNN-VEQYIK 366

Strain 23 AAFA---E---LDKKADELQNKVADLEKEISNLEILL-GGADPE---DDT-- 133

Strain 18 AAFA---E---LDKKADELQNKVADLEKEISNLEILL-GGADPE---DDT-- 135

SP 222 AAADANIEALQNKVADLENKVAELDKEVTRLQSDL-KDAEENN-VEQYVK 127

BG9163 ---E---E---LSGKIEELDAETAELE---V---Q--L-KDAEGNNNVEAYFK 297

EF6796 ---E---E---LSGKIEELDAETAELE---V---Q--L-KDAEGNNNVEAYFK 296

BG8090 AAFA---E---LDKKADELQNKVADLEKEISNLEILL-GGADPE---DDT-- 414

EF3296 ABFA---E---LDKKADELQNKVADLEKEISNLEILL-GGADSE---DDT-- 413

Rx1 ---E---E---LSDKIDELDAETAKLE---D---Q--L-KAAEENNNVEDYFK 261

DBL1 ---E---E---LSDKIDELDAETAKLEKNV---EY-F-KKTDAEQ-TEQYL- 283

EF5668 AAFA---E---LNKKVEALQNOVAELEELSKEEDNL-KDAETNN-VEQYIK 347

Wu2 ---E---E---LSDKIDELDAETAKLE---D---Q--L-KAVEENNNVEDYST 290

EF10197 ---E---E---LSDKIDELDAETAKLE---D---Q--L-KAAEENNNVEDYFK 282

PspA AC12 ABFA---E---LDKKADELQNKVADLEKEISNLEILL-GGADSE---DDT-- 321

DBL5 ---E---E---LSGKIEELDAETAELE---V---Q--L-KDAEGNNNVEAYFK 284

DBL6A ---EEDRRNYPTNTYKTLIDLEIAESDVKKEAELELVKEEAKESRNEEKVK 366

BG6380 GELTLILA-IQNKISDLDKTAEAEEKKLADSQ-----NGEG-VEDYWT 303

Figure 6

Figure 7: CD Spectrum of CVX0270

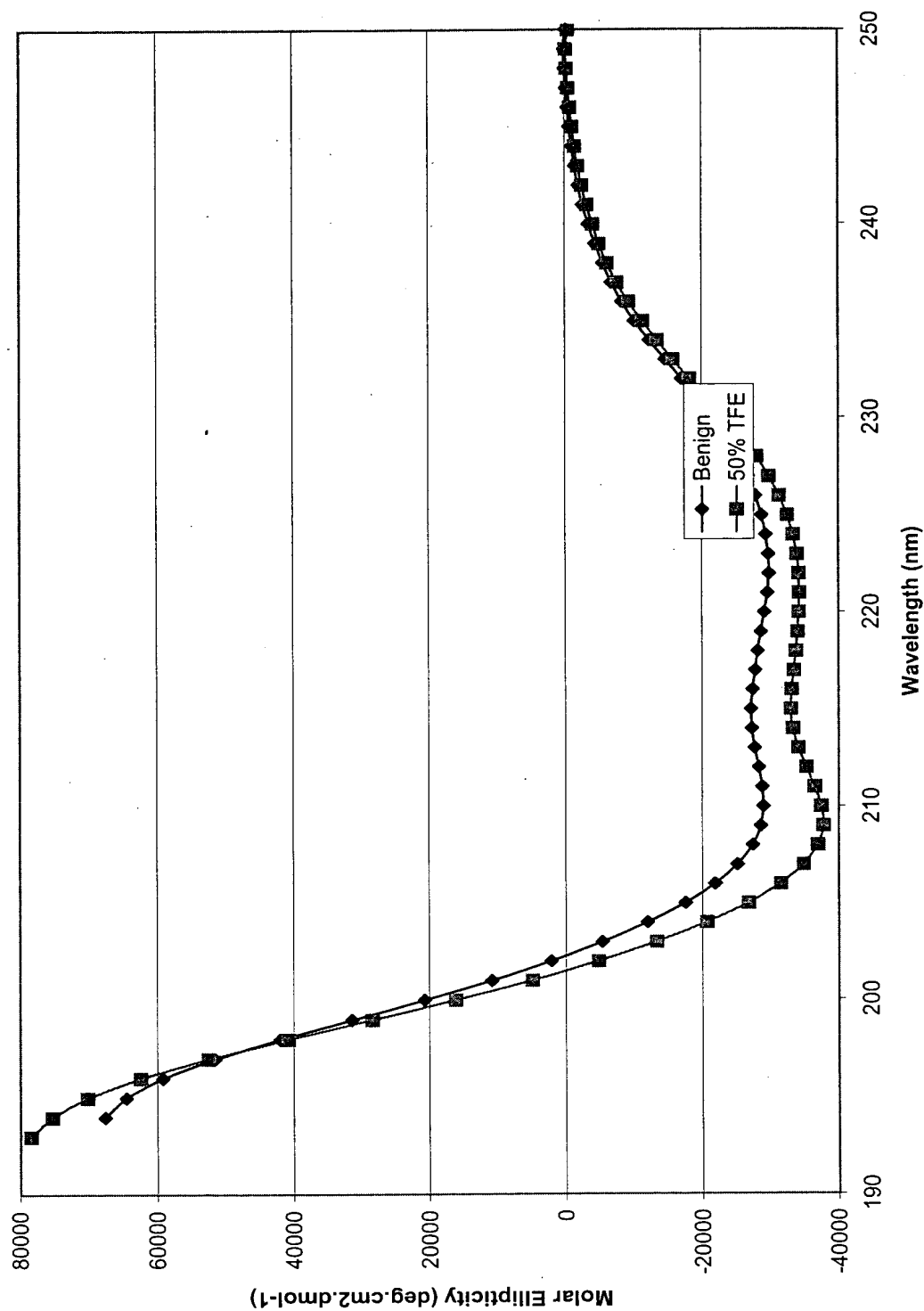


Figure 8: Thermal Denaturation of Peptide CVX0270

